

The National Park Service
U.S. Department of the Interior
Natural Resource Program Center
Biological Resource Management Division



Biological Resource Management Division FY03 Work Plan

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NATIONAL PARK SERVICE
BIOLOGICAL RESOURCE MANAGEMENT DIVISION
WORK PLAN: FY 2003

INTRODUCTION AND ORGANIZATION

The Biological Resource Management Division (BRMD) was created in FY 2000, through the Natural Resource Challenge. Funds were provided through the Challenge to strengthen the ability of the National Park Service to conduct science-based natural resource management. The BRMD is part of the NPS Natural Resource Program Center and the NPS Natural Resource Stewardship and Science Directorate, and maintains offices in Fort Collins, Colorado and Washington, D.C. Division elements include: the Exotic Species Management and Ecosystem Restoration Branch, the Integrated Pest Management (IPM) Program, the Endangered Species Program, the Park Flight Migratory Bird Program and the Wildlife Management Program.

Active resource management has become critically necessary as the natural and cultural heritage preserved within park boundaries is assailed by exotic species and other disturbances. Within two years the BRMD consolidated, initiated, and conducted activities to provide the NPS with a professional state-of-the-art science-based support program addressing exotic species management, ecosystem restoration, threatened and endangered species, migratory birds and wildlife management

(Please refer to Appendix A for Division Organizational Chart)

MISSION

The Mission of BRMD is to preserve, protect and manage biological resources and related ecosystem processes in the National Park System. The BRMD works to meet this mission through programs designed to meet the changing needs of resource managers within NPS. These programs, roles, functions and services are articulated in this Divisional Work Plan.

ROLES AND FUNCTIONS OF THE BRMD

The Division...

Is responsible for policy formulation, planning, training, coordination, and implementation of biological resource management activities and programs of broad Servicewide importance;

Provides expert scientific, planning and evaluation assistance on management actions and biological resource management issues;

Administers divisional and Servicewide competitive funding sources:

- Natural Resource Preservation Program (NRPP)
- Resource Protection
- Biological Resource Management

Identifies Servicewide biological research needs, develops management strategies, and identifies and provides training in biological resource management in such areas as:

- Invasive Species Management
- Ecosystem Restoration and Management
- IPM Services for Natural Areas and Developed Zones
- Endangered Species
- Wildlife Management
- Park Flight

**EXOTIC SPECIES MANAGEMENT & ECOLOGICAL
RESTORATION BRANCH PROGRAMS
ANNUAL WORKPLAN: FY 2003**

PERSONNEL:

Linda Drees	Branch Chief
Terry Cacek	IPM Coordinator – Wildland Invasive Pests
Carol DiSalvo	IPM Coordinator – Structural/Developed Area Pests
Steve Jacobs	IPM Contractor – Penn State University
Greg Eckert	Terrestrial Ecologist
Randy Walsh	STEP student
Summer Schulz	Biologist/ NRPP Program Analyst
Lori Betts	NRPP Program Analyst
Christine Bishop	Biologist Contractor
Luis Florez	Chihuahuan Desert EPMT Liaison
Patrick Wharton	Chihuahuan Desert EPMT Crew Leader
Jeremy Gooding	Pacific Islands EPMT Liaison
Lisa Jameson	National Capital EPMT Liaison
Corey Kudra	National Capital EPMT Crew Leader
Cullin Minter	EMPT Crew Leader
Antonio Pernas	Florida Partnership EPMT Liaison
Eric Worsham	Gulf Coast EPMT Liaison
Daniel Clark	Virgin Islands EPMT Liaison

GOALS AND FUNCTIONS:

The Exotic Species Management and Ecological Restoration Branch provides NPS lands with a wide range of innovative and science-based services and policy guidance to manage harmful invasive species, restore disturbed lands to ecological integrity, and to manage risks presented by structural and public health pests in both natural and developed areas. Focal points of the branch include: the IPM Program to determine low risk, environmentally sound options for pest control, the EPMT Program which facilitates the mobilization of strike teams of plant control specialists located in 9 host parks, and the Restoration Ecology Program which provides technical assistance on restoration, vegetation and ecosystem management, contaminants, soil ecology and coordination with the Fire Management Program Center. The Branch also focuses on the facilitation of partnership efforts to control exotic species and restore ecological systems to preserve NPS lands. Service is provided to personnel at parks, regions, the Natural Resource

Program Center, and the Washington Directorate. The Branch is also responsible for administration and coordination of the Natural Resource Preservation Program (NRPP).

SERVICES:

The Exotic Species Management and Ecosystem Restoration Branch provides the following services through the EPMT, IPM, NRPP and Ecological Restoration Programs:

- Servicewide policy and guidance development on invasive species, integrated pest management and ecological restoration
- Coordinate and cooperate with other federal and state agencies and national organizations on invasive species management and ecological restoration
- Facilitate partnership efforts to control exotic species and restore ecological systems to preserve NPS lands
- Program management and analysis for NRPP, BRMD and Resource Protection competitive funds
- Development and maintenance of the Pesticide Use Proposal System (PUPS) web-based data system
- Training on invasive species management, IPM and ecological restoration actions
- Facilitate NPS performance management activities related to invasive species management
- EPMT Program Management
- Collaborate with the Fire Management Programs Center (FMPC):
 - Participation in national teams to develop DOI strategies
 - Review national plans
 - Joint assessment of park resource issues
 - Development of a workshop to integrate resource issues into Fire Management Plans
 - Interdisciplinary resource assessments
- Technical Assistance to Regions and Parks, include:
 - Provide technical expertise for management of forest, structural, museum, and public health pests
 - Assistance with appropriate integrated pest management technologies
 - Review of NEPA compliance documents related to invasive species management
 - Remediation/restoration of disturbed areas

PROJECTS AND TASKS: Competitive Funding Programs

TITLE: Biological Management Division Annual Accomplishment Report
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: Ongoing
Description: The BRMD, formed in 2000 as part of the NRC to provide state-of-the-art science-based technical assistance and policy direction, will prepare and submit an annual report on accomplishments and expenditures.

TITLE: Administer Natural Resource Preservation Program
Region: Servicewide
Park: Servicewide
Lead: Johnston, Schulz, Betts
Completion: Ongoing
Description: The BRMD provides oversight and administration for NRPP competitive funding projects. Over 300 projects were funded in FY 2003. This funding source provides a reliable and dedicated source of resource management funding for national parks. Sixty percent of funds are usually available for unspecified park level natural resource management projects. The remaining 40% targets specific needs and is generally distributed to Small Park Projects, Disturbed Lands Restoration, Threatened and Endangered Species Projects, USGS/BRD Technical Assistance Projects and Servicewide Projects. The BRMD sponsors the ranking panels once a year, tracks and records implementation and completion reports, prepares funding advice memos upon completion of program requirements. Finally the BRMD prepares the comprehensive annual reports on NRPP fiscal year funding for submission to Congress and continues the production of an NRPP operations handbook which outlines operation and policies governing NRPP.

TITLE: Fee Demo Program (20%)
Region: Servicewide
Park: Servicewide
Lead: Johnston
Completion: Ongoing
Description: BRMD serves as the ADNRSS contact for the 20% fee demo program. BRMD coordinates submission of proposals, ranking of proposals by ADNRSS and serves on Servicewide panel to evaluate and rank projects.

TITLE: Challenge Cost Share Program (CCSP)
Region: Servicewide
Park: Servicewide
Lead: Johnston
Completion: Ongoing
Description: BRMD serves as the ADNRSS contact for the CCSP. BRMD coordinates submission of proposals, ranking of proposals by ADNRSS, and serves on panel to evaluate and rank projects submitted for funding through the Director's portion of CCSP funds.

TITLE: Forest Health Program
Region: Servicewide
Park: Servicewide
Lead: Cacek
Completion: September 30, 2003
Description: This involves administration of transfer funds from the U.S. Forest Service (USFS). Every year, BRMD solicits proposals from parks, provides technical assistance in the preparation of proposals and economic evaluations, collects and evaluates the proposals, forwards the proposals to the USFS, and distributes the funds. This typically involves one meeting per year with the USFS in Washington D.C. and one multi-agency field review.

TITLE: Pulling Together Initiative (PTI)
Region: Servicewide
Park: Servicewide
Lead: Drees, Johnston
Completion: On-going
Description: The Pulling Together Initiative is a partnership among many Federal agencies and the National Fish and Wildlife Foundation. The purpose of the PTI is to encourage the development of Weed Management Areas by providing support on a matching basis. Annually the PTI supports more than 30 projects related to the management of invasive plants. The NPS is an active member of the review committee for submitted projects and has benefited from having some of its projects funded.

PROJECTS AND TASKS: Invasive Species and IPM Programs

TITLE: Develop and Prepare for Proposed Fiscal Year 2004 - 2005 Invasive Species Cross-cut Budget Increase
Region: Servicewide
Park: Servicewide
Lead: Drees, Cacek
Completion: September 30, 2003
Description: The NPS has submitted proposed increases for invasive species management upon the request of the DOI as part of a cross-cut budget for FY2005. Staff has had to report proposed accomplishments under DOI performance measures and be responsible for tracking increased funds under DOI performance measures.

TITLE: Represent NPS on Fiscal Year 2005 Budget Cross-Cut for Exotic Species
Region: Servicewide
Park: Servicewide
Lead: Johnston, Drees
Completion: November 2003
Description: Coordinate with Department, Invasive Species Council staff, NPS budget office and others in developing the NPS component of the 05 cross cut budget

TITLE: Legislative Initiative for NPS authority to Expend Resources on Natural Resource Related Projects Outside Park Boundaries
Region: Servicewide
Park: Servicewide
Lead: Johnston
Completion: April 2003
Description: Coordinate with NPS Office of Legislative and Congressional Affairs, NRPC Divisions, and others in preparing and submitting Legislative Support Data Package.

TITLE: Development of a Natural Resource Invasive Law and Policy Course Section for Use by Natural Resource Managers
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: September 2003
Description: A brief 2 hour segment on significant invasive species laws and policies with applicability to the NPS will be prepared and made available to course trainers.

TITLE: Year in Review Article on Exotic Plant Management Teams
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: January 18, 2003
Description: The Exotic Species and Ecological Restoration Branch was requested to produce an article on the accomplishments of the EPMT's from January 2002 – January 2003 for the NPS Year in Review publication. The article and photos were prepared and presented to Year in Review staff for edit and publication.

TITLE: Performance Management Goal Coordinator 1alb – Exotic Species, 1a10 – Exotic Animal Populations, and 1a2x – Native Species of Concern
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: Ongoing
Description: The BRMD is the Servicewide wide goal coordinator for goal 1a1b – Containment of Exotic Plant Species, 1alb – Exotic Species, 1a10 – Exotic Animal Populations, and 1a2x – Native Species of Concern. Staff continually provides technical guidance and reports Servicewide accomplishments of 1alb, 1a10, and 1a2x using PMDS.

TITLE: NPS Park Science Publication on Invasive Species
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: September 30, 2003
Description: BRMD will work with Ron Hiebert of the Southwestern Ecosystem CESU to develop a special issue of Park Science on invasive species management issues on park lands. Division staff will prepare an article on the EPMT's and other invasive management activities.

TITLE: Resource Activity Management System (RAMS) Training
Region: Servicewide
Park: Servicewide
Lead: Schulz, Betts
Completion: Ongoing
Description: BRMD staff person was delegated to serve as a system trainer to NPS natural and cultural resources personnel for the use and administration of RAMS.

TITLE: Re-design of NPS Internet and Maintenance of Intranet
Region: Servicewide
Park: Servicewide
Lead: Schulz, Betts
Completion: Ongoing
Description: The BRMD is one of the NPS natural resource management divisions participating and giving strong input for the re-design of the NPS NatureNet internet site. BRMD is also responsible for populating, updating and maintaining the Division pages of InsideNPS, the NPS intranet site. This includes the posting of EPMT Quarterly reports.

TITLE: Branch/ EQD Development of Model NEPA Compliance Documents for EPMT's
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: September 30, 2003
Description: BRMD will cooperate with the Environmental Quality Division to produce a model NEPA compliance document for EPMT's. This will enhance compliance with DO-12 and provide a needed tool to parks conducting vegetation management.

TITLE: Field Testing of On-Line Weed Course
Region: Servicewide
Park: Serviceiwde
Lead: Neel, Gooding, Schulz, Eckert, Jameson
Completion: September 2003
Description: BRMD staff have been requested by the Center for Invasive Plant Management to test a model on-line weed management course. The participants will test the model over the next year and provide comments and recommendations for change to the Center.

TITLE: Invasive Weed Awareness Committee (IWAC)
Region: Servicewide
Park: Servicewide
Lead: Johnston, Drees
Completion: On-going
Description: The NPS is a member of this ad hoc group composed of environmental industry and government organizations. The goal of IWAC is to increase awareness and understanding of the invasive plant issue. IWAC accomplishes this goal by sponsoring the National Invasive Weed Awareness Week, weed tours as well as briefings.

TITLE: National Invasive Weeds Awareness Week (NIWAW), Washington, D.C.
Region: Servicewide
Park: Servicewide
Lead: Johnston, Drees
Completion: February 2003
Description: NIWAW and the International Aquatic Nuisance Species Conference will be in D.C. from February 24-28, 2003. NPS is represented on the Invasive Weed Awareness Committee that organizes NIWAW, and is committed to invasive species management, so was asked to participate through presentations, poster sessions and meetings with partners during this week. NPS helped organize activities for FY03 and plan for FY04, provided daily presentations at events to inform and educate policy makers on NPS invasive species management efforts, including the EPMTs.

TITLE: Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW)
Region: Servicewide
Park: Servicewide
Lead: Johnston, Drees
Completion: On-going
Description: FICMNEW is an interagency committee composed of 17 Federal agencies. The Committee initiates various projects related to the management of exotic and noxious weeds, coordinates among member agencies and interacts with the Invasive Species Awareness Council.

TITLE: EPMT Orientation
Region: Servicewide
Park: Servicewide
Lead: Drees, Cacek
Completion: May 2003
Description: A 3-day EPMT Orientation will be conducted for all 16 EPMT liaisons, leads, and supervisors. New teams will be oriented and current teams will be updated on policies, procedures and techniques in support of operation of EPMT's within the NPS.

TITLE: Update EPMT Operations Handbook
Region: Servicewide
Park: Servicewide
Lead: Pernas, Drees
Completion: Ongoing
Description: Coordinate the update of the EPMT Operations Handbook for 2003. The handbook guides the operation of the EPMT's in the field.

TITLE: Exotic Plant Management Team Annual Report
Region: Servicewide
Park: Servicewide
Lead: Drees, Reep
Completion: October 30, 2003
Description: BRMD provides budget oversight, selected administration and technical assistance to the 16 mobile EPMT's based in host parks. The branch tracks quarterly/ annual accomplishments and budget expenditures through the Alien Plant Control and Management (APCAM) database and other database formulations. An EPMT annual accomplishment report is prepared and included as part of the BRMD annual report.

TITLE: Exotic Plant Management Team Supervision and Administration
Region: Servicewide
Park: Servicewide
Lead: Drees, Cacek
Completion: September 30, 2003
Description: Day by day supervision of the EPMT's is a responsibility of the 16 host parks, however, BRMD provides financial administration, review of personnel actions, technical oversight, training, programmatic guidance, and, if necessary, dispute resolution. BRMD also maintains a flow of information to WASO and outside interested parties.

TITLE: Review of The Federal Interagency Committee on Management of Noxious and Exotic Weeds (FICMNEW) Plans for Early Warning and Rapid Response
Region: Servicewide
Park: Servicewide
Lead: Cacek
Completion: December 2002
Description: FICMNEW is preparing a plan for creating a system to provide early warning and rapid response to weeds. This is of vital concern to NPS because our EPMT's could play a major role. We will assure that NPS needs and capabilities are included in the plan.

TITLE: EPMT Quarterly Reports on InsideNPS
Region: Servicewide
Park: Servicewide
Lead: Drees, Schulz, Betts
Completion: September 2003
Description: EPMT quarterly progress reports, which describe species treated, acres treated, staff hours, and technical assistance provided per park served by teams, will be posted on InsideNPS.

TITLE: Alien Plant Control and Management Database (APCAM) Workshop and Implementation.
Region: Servicewide
Park: Servicewide
Lead: Cacek, Kogan
Completion: May 2003
Description: The APCAM database was utilized, refined and updated at a workshop held in Fort Collins, CO, with collaboration from the NPS I&M Program, BRMD and EPMTs. The database contains a catalogue of fields to record and measure control and restoration activities used by all EPMT's. APCAM also has application for I&M Networks which may conduct invasive species mapping and monitoring.

TITLE: Field Operations of EPMT's
Region: Servicewide
Park: Servicewide
Lead: All Liaisons and Leaders
Completion: Ongoing
Description: Field operations to conduct invasive plant control and management, mapping and inventory are conducted annually by EPMT's. The EPMT's control an average of 8,000 acres annually. The EPMT's provide technical assistance and review proposals submitted by parks for control projects, conduct mapping, monitoring and control, and conduct outreach activities.

TITLE: Development of Invasive Plant Management Outreach
Region: Servicewide
Park: Servicewide
Lead: Jameson, Florez, Drees
Completion: September 30, 2003
Description: EPMTs have been established and are operating in all regions of the country. To better respond to requests for information on invasive species in parks as well as the operation of the EPMT's, a traveling display will be developed for use at parks and professional meetings. BRMD staff will also work with NRID to enhance the Invasive Species Knowledge Center.

TITLE: National Invasive Species Conference in Fort Lauderdale, Florida
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: Spring 2004
Description: BRMD will submit abstracts for a session on operation of NPS EPMT's in natural areas. This will highlight the work of the teams to cooperators and other partners working on invasives which affect park lands.

TITLE: George Wright Society Conference
Region: Servicewide
Park: Servicewide
Lead: Drees, EPMT Liaisons, DiSalvo
Completion: April 2003
Description: Submission of abstracts on EPMT's retrospective (4 hour seminar), poster, and side meeting on EPMT program review by October 21, 2002. Also, submission of an abstract to conduct a presentation on the IPM program for the NPS.

TITLE: Exotic Plant Management Team Evaluation
Region: Servicewide
Park: Servicewide
Lead: Cacek
Completion: September 30, 2003
Description: The evaluation will stop short of evaluating the technical aspects of field work, which will be done in a later fiscal year. The current effort will involve development of an evaluation scheme, recruitment of evaluators from inside and outside NPS, EPMT evaluation, and composition of a final report. If done by contract, it will involve writing a scope of work, selecting a contractor, and administering the contract.

TITLE: Cultural Landscapes and Invasive Species Management
Region: Servicewide
Park: Servicewide
Lead: Eckert, Drees
Completion: Ongoing
Description: BRMD will work with cultural resources to determine effective mechanisms to preserve cultural resources and reduce impact of invasive species.

TITLE: Planning Biocontrol Risk Assessment/ Analysis Workshop with USDA
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: September 2003
Description: The February 2004 workshop proposed by USDA, with NPS participation, will develop a biocontrol risk assessment model. This tool can be used by parks to determine the appropriateness of biocontrol for use on invasive species. BRMD staff will coordinate with USDA in development of agenda and holding the workshop.

TITLE: Advisory Group on the Bio-Control of Weeds
Region: Servicewide
Park: Servicewide
Lead: Cacek
Completion: Ongoing
Description: BRMD represents NPS on the Advisory Group on the Bio-Control of Weeds, which reviews testing protocols and proposals for the release of biological control agents. This involves review of technical proposals for individual biological controls and representation of NPS at an annual meeting in Washington, D.C.

TITLE: NPS Inventory and Monitoring of Invasive Plants Workshop
Region: Servicewide
Park: Servicewide
Lead: Drees, Hiebert
Completion: August 30, 2003
Description: Follow-up and website posting of results of workshop held in 2002.

TITLE: Revision of NPS-77-7 (Integrated Pest Management)
Region: Servicewide
Park: Servicewide
Lead: Drees, Cacek, DiSalvo
Completion: September 30, 2003
Description: NPS-77, developed and adopted in 1988, is under revision to reflect and correspond to the updated "Management Policies 2001"/NPS Directive System initiated in 2001. Review of the 1988 NPS-77 was conducted with comments and amendments provided during the 2001 IPM Coordinators Workshop. Amendments reflect new technologies, laws and regulations, and structural changes in the IPM program within NPS. As a result of the review and comments a draft DO and RM will be developed and provided to the NPS Chief of Policy for distribution to the NLC.

TITLE: DOI Environmental Summit
Region: Servicewide
Park: Servicewide
Lead: Drees, DiSalvo
Completion: September 2003
Description: The IPM and EPMT Programs will submit an abstract to conduct a 4-hour seminar on use of structural and landscape IPM to DOI Environmental Summit in Phoenix, Arizona.

TITLE: Serve as NPS West Nile Virus (WNV) Liaison
Region: Servicewide
Park: Servicewide
Lead: DiSalvo
Completion: December 2003
Description: Serve as liaison for US Public Health Service and others concerning risks associated with WNV and management of mosquitoes on NPS lands.

TITLE: National Pollinator Protection Campaign (joint NPS and Canada)
Region: Continent Wide (USA, Canada, Mexico)
Park: Servicewide
Lead: DiSalvo
Completion: December 2003
Description: Prepare grant proposal "Socio-Economic Report on the Importance of Pollinators in 2 Case Studies (Apples and Wildland Orchids)."

TITLE: National Pollinator Protection Campaign (joint NPS and EPA)
Region: Servicewide
Park: Servicewide
Lead: DiSalvo
Completion: December 2003
Description: Prepare chapter on pollinators and 210 questions for Core Exam/ Manual with EPA for adoption into state pesticide applicator training certification.

TITLE: Government Authorized Operator, Dow Sentricon Monitoring Stations
Region: Servicewide
Park: Servicewide
Lead: DiSalvo
Completion: December 2002
Description: NPS' licensed pesticide applicators have the opportunity to become government-authorized applicators under Dow-Elanco. This avoids NPS having to use a commercial applicator when using Sentricon Bait Stations.

TITLE: Participation in the National IPM Conference
Region: Servicewide
Park: Servicewide
Lead: Drees, DiSalvo
Completion: Spring 2003
Description: BRMD staff will participate in a national workshop to develop a National IPM Certification and federal pesticide applicators license. This will benefit park IPM programs by facilitating training in IPM and permitting park personnel to work in parks in different states without new licensing.

TITLE: Development of National IPM Certification
Region: Servicewide
Park: Servicewide
Lead: Drees, DiSalvo
Completion: September 2004
Description: BRMD will work with USDA-CREES to develop and promote implementation of a National IPM Certification and Federal pesticide applicators license. Staff will attend a scooping meeting in Washington D.C. sponsored by USDA on November 5, 2002 and participate in the final development workshop in Spring 2003 at the National IPM Conference.

TITLE: Prepare IPM Case Histories
Region: Servicewide
Park: Servicewide
Lead: DiSalvo
Completion: December 2002
Description: Prepare scope and contract for writer/editor familiar with IPM and NPS to prepare IPM Case Studies as reference and training document.

TITLE: New NPS USFWS IPM Principles Course
Region: Servicewide
Park: Servicewide
Lead: DiSalvo
Completion: May 2003
Description: Adjust and update original NPS IPM Principles Course as a joint course to serve both NPS and USFWS employees. This course provides the basic IPM Principles using lectures, multi-media presentations and hands-on exercises for 30 students. This course will be held in May 2003.

TITLE: NPS Interprogram Response to Zoonotic/ Environmentally Transmitted Diseases, Public Health Program
Region: Servicewide
Park: Servicewide
Lead: Drees
Completion: January 7–8, 2003
Description: The goal of this workshop is to develop a system of standard operating procedures for determining lead responsibilities and response to categories of zoonotic/ environmentally transmitted diseases. The workshop participants will also be briefed on the Johns Hopkins/ DOD early warning system project for bio-terrorism focusing on domestic animals/ wildlife.

TITLE: Administration of Pesticide Use Proposal System (PUPS)
Region: Servicewide
Park: Servicewide
Lead: Cacek, DiSalvo
Completion: Ongoing
Description: Approximately 1,500 pesticide use proposals are processed annually using the intranet-based software. Pesticide proposals are reviewed by Cacek, DiSalvo, and regional IPM Coordinators. Other activity includes maintenance of the pick lists, with focus on the pesticide product list, which must be updated continually, and preparation of an end-of-year summary of pesticide use and/or compliance with pesticide reporting.

TITLE: Enhancement of the Pesticide Software
Region: Servicewide
Park: Servicewide
Lead: Cacek
Completion: Ongoing
Description: With the expertise from NRID, several new capabilities were added to the pesticide management software of the PUPS database: ability to print blank forms; and an automated report listing proposals and their status. The use of auto-messaging to track response rate and add section for recording bio-control was also added.

TITLE: Coordinate with Public Health Service on DO 83, Vector-Borne Diseases
Region: Servicewide
Park: Servicewide
Lead: Cacek
Completion: December 2002
Description: This DO has implications for both the IPM & Wildlife Diseases Programs. Consolidated comments will be provided to the Public Health Service.

TITLE: Transfer of Pesticide Data to National Archives
Region: Servicewide
Park: Servicewide
Lead: Cacek
Completion: Ongoing
Description: The National Archives is requiring that BRMD submit pesticide data for all previous years. NRID has primary responsibility for this, however, BRMD must ensure that they have all the data and must help resolve changes in database format that evolved over the years.

TITLE: Saltcedar Technical Review
Region: All Western Regions
Park: All Western Regions
Lead: Cacek
Completion: September 30, 2003
Description: Facilitate, in concert with Southwestern EPMT's and LAMR, an event or process for reviewing available technology for managing saltcedar, educating NPS personnel about the technology, and developing strategies for introducing appropriate technologies to NPS lands.

TITLE: Survey of Bio-engineered Crops
Region: Servicewide
Park: Servicewide
Lead: Cacek
Completion: September 30, 2003
Description: Bio-engineered crops are being used by several parks, however, the extent of use is unknown. A survey will be designed and conducted to reveal the types of bio-engineered organisms being utilized on NPS lands, the acreage involved, and the locations.

TITLE: Increase Technical Assistance for IPM in Developed Areas
Region: Servicewide
Park: Servicewide
Lead: Cacek, DiSalvo
Completion: December 2003
Description: Additions of new park units increased exotic species management needs and increased demands for structural IPM expertise. This, in turn, requires having a part-time entomologist/ IPM expert in such a capacity so as to serve park IPM technical assistance.

TECHNICAL ASSISTANCE: Invasive Species and IPM Programs

PROJECTS AND TASKS: Restoration Ecology Program

TITLE: Coordination with Fire Program
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: Coordination will include: Workshop on DFCs for fire management plans, Primer on beneficial use of fire (NRID-ISB), Input to Joint Fire Science

Program, BAER support as requested, and Co-author white paper on Healthy Forest Initiative.

TITLE: Coordinate BRMD Cooperative Agreement for Bio-Statistical Support
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: September 30, 2003
Description: Coordinate 9 park requests through the TAC to the University of Wyoming. Evaluate first year of the cooperative agreement.

TITLE: Technical Bulletins: Mycorrhizal Assessment. Mycorrhizal Inoculum Development
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Summer 2003
Description: Many assessments of disturbed lands and site restoration potential require, among other things, establishing the role of mutualistic mycorrhizal associations between plants and soil fungi. A methods paper will provide step-by step direction on preparing root and soil samples for analysis by specialists, thereby saving money for parks. A second paper will show how to bulk up native mycorrhizal fungal inoculum using minimal technology to enhance revegetation and soil restoration projects.

TITLE: Coordinate BRMD Technical Assistance Requests
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: September 30, 2003
Description: Receive, coordinate and track BRMD leads on approximately 71 Technical Assistance Requests from parks. Establish ACCESS database for BRMD TAR from 2001.

TITLE: Interdivisional Advisory Groups
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: Represent terrestrial biological and ecological issues on interdivisional workgroups addressing multi-media and resource issues on NPS units. Groups within the NRPC are the Contaminants Technical Advisory Group, the Fire Technical Advisory Group, the Restoration Technical

Advisory Group, and the Soils technical Advisory Group. Continue to develop long-term strategy for restoration with RTAG.

TITLE: General Ecological Management Issues
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: Respond to various short-term requests for review of documents, proposals and actions related to terrestrial ecosystem management issues from parks. Examples include approaches to habitat for a rare organism that conflicts with Fire Management needs, role of burning in contaminated areas, resource assessment, emergency rehabilitation, and strategies for compatible economic and conservation land use on non-park lands. NRPC lead to develop an MOU with TNC and to update the MOU with NRCS.

TITLE: Update and Integrate Vegetation Management into NPS RM-77
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Spring 2003
Description: NPS-77 has been replaced with DO-77 and RM-77. The Vegetation Management section has been updated to reflect NPS Management Policies 2001, along with new approaches and techniques in management.

TITLE: South Western Park Restoration Workshop
Region: Pacific West, Intermountain
Park: Multi-Park
Lead: Eckert
Completion: March 2003
Description: Assist in workshop development. Use workshop as a forum to collect and assess restoration needs from NPS and restoration and revegetation specialists from this ecological zone.

TITLE: Terrestrial Ecosystem Impairment Guidelines
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: NRPC scientists and other staff continue to refine guidelines to parks for valuating potential impairment of natural resource issues. Natural ecosystem and vegetation dynamics require guidelines for parks to assign

levels of degradation to these systems and processes that normally require large and long-term data sets.

TITLE: American Chestnut Introduction
Region: Northeast, National Capital, Southeast
Park: All in *C. dentata* range
Lead: Eckert
Completion: Fiscal Year 2003
Description: With the help of Jim Sherald (NCR), organize a workshop to evaluate advances in science, propagation and management of hybrid and native varieties of *C. dentata*, and developing NPS's role in the effort to restore *C. dentata* to eastern forests.

TITLE: Role of Eastern Parks in Natural Resource Conservation
Region: National Capital, Southeast, Northeast
Park: N/A
Lead: Eckert
Completion: Ongoing
Description: Continue developmental work with NER and NCR scientists to assess needs and main issues for identifying the role of eastern parks in natural resource conservation. Main issues anticipated are integration with cultural resource management objectives, fire, deer herbivory, reintroductions, rare species and communities, park borders/landscape fragmentation and pollutants.

TITLE: Emerging Issues in Restoration Ecology
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: Track emerging issues in restoration and management. Integrate into existing programs or policies or propose new policies or programs as appropriate. Examples include the selection of appropriate indicators for restoration projects, and assessing restoration of pollinators and dispersers.

TITLE: Disturbed Lands Restoration Inventory and Assessment
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Fiscal Year 2003
Description: The NPS Disturbed Lands Restoration Program has initiated an effort to develop better data to inventory, assess and prioritize land restoration

needs. A technical review team will develop new criteria for park use and field test.

TITLE: Fund SRR Participation by NPS Scientists
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Summer 2003
Description: Coordinate and support NRPC, regional and park staff to participate and articulate NPS concerns and perspectives to the Sustainable Rangelands Roundtable and subsequent “sustainability” roundtables generated by the Rio Earth Summits.

TITLE: Plant Conservation Alliance
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: Represent NPS to this public-private consortium to coordinate information and expertise, and provide leadership in issue identification and policy development. Revitalize the dormant restoration working group.

TITLE: Develop Proposals for Improved Integration of NPS Restoration Programs
Region: Servicewide
Park: Servicewide
Lead: Eckert/Steensen
Completion: Ongoing
Description: Develop a PMIS Statement that will include an Action Plan to identify needs, integrate approach to support, planning and management, funding for ecosystem restoration, incorporation of ecological hierarchies into planning, implementation and monitoring, development and incorporation of DFCs, models in GMPs and management philosophy. Emphasize need for more funding for soil programs.

TITLE: Technical Oversight of NRPP and BRMD Competitive Projects
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: Projects addressing restoration, soil ecology and ecosystem management funded by NRPP and BRMD programs require technical oversight for

scientific quality, approval of detailed implementation plans, annual accomplishment reports, and end of project completion reports.

TITLE: Invasive Species Control Support
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: Support includes: Provide input to agenda for intermountain restoration workshop, Revision on EPMT Handbook, EPMT Orientation, Develop relationship for research support with CSU Weed Ecologist, and Technical Bulletin on restoration after Tamarisk Control.

TITLE: Plant Genetics and Materials Analysis
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: This is an effort to incorporate new scientific findings and clarity to NPS policies on the genetic make-up of plant and other biological materials brought into parks for restoration purposes, and how materials taken from parks may be distributed. First efforts will be to assess scientific presentations at the AAAS Meeting in Denver February 03, and to organize an additional group of experts to summarize the state of the science of genetic conservation.

TITLE: Performance Goal Development for Watersheds and Landscapes
Region: Servicewide
Park: Servicewide
Lead: Eckert
Completion: Ongoing
Description: Represent BRMD on working groups to develop GPRA definitions and strategies for Watersheds and Landscapes Performance Goals for parks.

TITLE: Society for Ecological Restoration Symposia
Region: Midwest and Servicewide
Park: N/A
Lead: Eckert
Completion: Fall 2003
Description: Will work with park staff to organize an oral session focusing on Midwestern park restoration projects. This will be combined with a

separate session with NPS staff to discuss restoration and revegetation needs and issues and resources in grasslands and woodland parks. We will also work with Parks Canada to prepare symposia on the Ecological Restoration and Parks: Experiences, Roles and Futures.

TECHNICAL ASSISTANCE: Restoration Ecology Program

TITLE: Restoration of Vegetation / NRDA support
Region: Northeast
Park: MORR
Lead: Eckert
Completion: Ongoing
Description: Development of townhouses adjacent to the park boundary this past summer has encroached on NPS property. Removal of soil and vegetation along the park boundary and onto park property for approximately 10-20 feet has resulted in destabilization of a steep slope on park property and soil loss from erosion. Additional soil erosion occurs whenever a substantial rain event occurs. The park is in need of technical assistance to determine type, amount and cost for erosion control structures and replacement of soil and vegetation. BRMD will provide support to Natural Resource Damage Assessment related to revegetation and erosion control guidance and potential cost recovery from the responsible party.

TITLE: Superfund Remediation
Region: Washington Office
Lead: Eckert
Completion: Ongoing
Description: 500 – 1000 ha. of NPS land have been contaminated as a result of smelter operations through last century. Large tracts of Blue Mountain are completely denuded and contaminated soil represents a significant barrier to restoration. NPS property is part of an EPA Superfund site (“Palmerton Zinc”). BRMD will develop soil and plant community restoration strategies on lands affected by heavy metal deposition, and to the extent possible, integrate restoration objectives with EPA and FWS objectives to contain contaminants in subsoil. If this fails, BRMD will support the Park’s NRDA effort.

TITLE: Native Grass on Earthworks
Region: Northeast
Park: VAFO
Lead: Eckert
Completion: Summer 2004
Description: Test the success of native grass cover in preventing erosion on historic military earthworks and develop a clear process for planning, establishing,

monitoring and maintaining native grasses on historic military earthworks. BRMD will identify and assist in implementing the re-establishment of native grasses on earthworks. Techniques will be tested and evaluated for potential transfer to other eastern park earthworks. Deliverables include a written project process that includes:

- Site preparation specifications
- Planting specifications
- Seed/plant source information
- Cost estimates for implementation
- Maintenance specifications
- Monitoring protocol

TITLE: Nine-Point Draw Watershed Restoration
Region: Intermountain
Park: BIBB
Lead: Eckert
Completion: Ongoing
Description: A ranch encompassing up to 45,000 ha of the Rosillos watershed had been added to the park in the 1980's. Despite soil conservation efforts in the past, the landscape is completely degraded, and has led to the enhancement of erosional processes. BRMD will participate with an NRPC team and other experts to identify the appropriate ecosystem to replace at the site and identify technical approaches to establishing native plants in this system.

TITLE: Prairie Restoration Evaluation
Region: Midwest
Park: FOUN
Lead: Eckert
Completion: Spring 2003
Description: Complete an evaluation of prairie plantings conducted through the 1990s and recommend follow-up actions and monitoring.

TITLE: Ecosystem Management of Hemlock Decline
Region: Northeast
Park: DEWA
Lead: Eckert
Completion: Spring 2003
Description: BRMD will collaborate with park staff to convene a scoping session of subject matter experts (silviculture, ecological restoration, fire) to develop

restoration prescriptions for one park hemlock stand and to identify and prioritize management objectives for the park's hemlock forests; and will summarize scoping session outcomes in a written report which will become the foundation for a management plan.

TITLE: Evaluate Burned Area Rehabilitation Management
 Region: Intermountain
 Park: MEVE
 Lead: Eckert
 Completion: Spring 2003
 Description: We would like a professional assessment of the environmental damage caused by wildfires and fuel reduction as well as the mitigation and regeneration to see how we are doing. BRMD will review site conditions as well as appropriate management plans to provide a report evaluating how the park is recovering from wildfire and fuel reduction actions.

TITLE: Longleaf Pine/Wiregrass Restoration
 Region: Southeast
 Park: TIMU
 Lead: Eckert
 Completion: Summer 2003
 Description: Follow-up to 2002 site visit to draw up restoration strategies in clear-cut upland sites.

TITLE: Review of Red Dog Mine Reports, etc.
 Region: Alaska
 Park: CAKR
 Lead: Eckert
 Completion: Ongoing
 Description: Review and comment on reports generated by park scientists, mine company, etc.

New Projects that may be addressed this year, if time allows:

GOGA	Restoration of Army waste pits in the Presidio
HOME	Fire history of woodlands
GRCA	Landscape analysis for fire planning
GUIS	Management vision of live oak forest
YOSE	Contaminant report reviews

COLO	Review of Jamestown 400 LTEM plan
COLO	Review of sinkhole management plan
PRWI	Restoration of native vegetation on mine rehab site
PRWI	Review of contaminant reports
CABR	Lighthouse area restoration
GAAR/ YUCH	Restoration and fire planning

ENDANGERED SPECIES PROGRAM

ANNUAL WORKPLAN: FY 2002

PERSONNEL:

Loyal A. Mehrhoff	Program Manager/ Endangered Species Specialist - Plants
Peter Dratch	Endangered Species Specialist - Animals
Vacant	SCEP/STEP Student

GOALS AND FUNCTIONS:

The primary goals of the NPS Endangered Species Program (Program) are to promote viable populations of endangered species in parks and to fully meet all obligations under the Endangered Species Act (ESA). The Program functions as a source of technical expertise with respect to endangered species issues. This involves providing expertise on endangered species regulations and the appropriate management of endangered species to:

- The Associate Director, Natural Resource Stewardship and Science
- The Chief, Biological Resource Management Division
- The Natural Resource Program Center
- Regional Endangered Species Coordinators
- Resource managers at individual parks

To meet its goals, the Program needs to help NPS accomplish six key tasks:

- Fully comply with ESA requirements to consult with the U.S. Fish and Wildlife Service and National Marine Fisheries Service on projects that may affect listed or proposed species
- Monitor the status of listed species in order to better tailor NPS management efforts
- Control invasive alien species that threaten listed, proposed, or candidate species
- Restore native ecosystems in parks
- Reestablish native species that have been extirpated from parks
- Control poaching within parks

SERVICES:

The Endangered Species Program provides the following services:

- Development and maintenance of program initiatives to improve management of endangered species
- Servicewide policy development
- Review and interpretation of new regulations, executive orders, and directives
- Liaison with other federal agencies, tribal governments, and national organizations on endangered species issues
- Provide database and other information on endangered species to park units
- Management of NRPP-T&E funding program
- Coordination of the NPS Performance Management program for endangered species
- Training on the Endangered Species Act and the management of endangered species
- Technical Assistance to Regions and Parks, to include:
 - Review of NEPA and ESA compliance documents
 - Review of endangered species management issues or plans
 - Assistance with performance management issues
 - Assistance obtaining additional scientific expertise (e.g., genetics)

PROJECTS AND TASKS:

- | | |
|---------------------|--|
| TITLE: | Update Endangered Species Database. |
| Region: | Servicewide |
| Park: | Servicewide |
| Lead: | Mehrhoff |
| Completion: | June 2003 |
| Description: | This database provides information on the occurrence of endangered, proposed, and candidate species in NPS units. Data includes the status and trends of species, listing information, and recovery plan information. Databases will be updated to include GPRA expenditures and species trends. The Colorado Heritage Program, Colorado State University and Colorado Plateau CESU are cooperators. |
| | |
| TITLE: | MOU with the U.S. Fish & Wildlife Service (USFWS) on Migratory Birds |
| Region: | Servicewide |
| Park: | Servicewide |
| Lead: | Dratch |
| Completion: | February 2003 |
| Description: | This MOU outlines how NPS will conserve migratory birds on NPS lands. It also addresses procedures for NPS to legally take migratory birds. |

TITLE: Management Summaries for Endangered Species
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: October 2004
Description: These management summaries describe specific actions that NPS managers can and should take to restore endangered species on NPS lands. 200 summaries are in draft form with another 200 needed. Task Agreements need to be established for the completion of summaries. Draft summaries need to be finalized. The Colorado Heritage Program and Colorado State University are cooperators.

TITLE: Cooperative Agreement with the Center for Plant Conservation
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: March 2003
Description: The Cooperative Agreement with the Center for Plant Conservation provides a mechanism for NPS to field collect seed samples from rare and endangered plants, store them at the National Seed Storage Laboratory, and provide for research on germination requirements.

TITLE: Conservation Agreement on the Canada Lynx
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: August 2003
Description: This Conservation Agreement has been reviewed by the Office of the Solicitor and now is being revised. It outlines how NPS will manage lynx on NPS lands. It also provides a foundation for park consultations with the USFWS.

TITLE: Conservation Agreement on the Black-Tailed Prairie Dog
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: April 2003
Description: This Conservation Agreement outlines how NPS and other agencies will manage black-tailed prairie dogs on NPS lands. It also provides a foundation for park consultations with the USFWS and for future re-establishment efforts.

TITLE: Revise and Maintain Performance Management System on Endangered Species
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: Ongoing
Description: The NPS performance management program maintains data on one service-wide goal on endangered species. The Endangered Species Program has revised the goal and will continue to provide whatever oversight is needed to ensure quality control. An updated database will be developed and provided to park units.

TITLE: Manage NRPP-T&E funding source
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: Ongoing
Description: This funding source commits approximately \$500,000 of NRPP annually to projects on endangered species. The Endangered Species Program organizes the review of project proposals, the convening of a review panel, and oversight of funds.

TITLE: Manage Native Plant Conservation Initiative funding program
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: Ongoing
Description: This funding source commits approximately \$50,000 of NPS funding annually to projects on native plant species. The Endangered Species Program organizes the submission of project proposals, participates in the review panel, and tracks project completion.

TITLE: Administer Resource Protection Funding Program
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: Ongoing
Description: This funding source commits approximately \$300,000 of NRPP annually to projects that promote law enforcement efforts to protect natural resources. The Endangered Species Program organizes the review of project proposals, the convening of a review panel, and oversight of funds. Four projects have been funded for 2003.

TITLE: MOU with Smithsonian Institution on Management of NPS Collections
Housed at National Museum of Natural History
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: May 2003
Description: This MOU will outline how NPS can house biological specimens at the National Museum of Natural History. The MOU will establish streamlined protocols for The Smithsonian to comply with NPS directives.

TITLE: Training on the NPS Endangered Species Program
Region: MWR and NER
Park: Servicewide
Lead: Dratch
Completion: September 2003
Description: The Endangered Species Program will provide training on the Endangered Species Act to regions.

TITLE: Revision of Endangered Species Brochure
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: June 2003
Description: The revised brochure will provide current information on endangered species in the National Park System.

TITLE: Endangered Species Web Page
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: September 2003
Description: The Endangered Species web page will be improved to include reference information on park species lists, recovery plans, species trend status, and expenditures.

TITLE: Monkey Flower Monitoring
Region: Midwest
Park: SLBE
Lead: Mehrhoff
Completion: September 2003
Description: The program will be assisting Steve Yancho (231-326-5134) with technical assistance on monitoring for monkey flowers.

TITLE: Jamestown Island 400 Project Assistance
Region: Northeast
Park: COLO
Lead: Mehrhoff
Completion: Ongoing
Description: The Jamestown Island 400 project is a large effort by NPS to celebrate the 400th anniversary of the founding of the Jamestown settlement. There are a number of endangered species issues associated with this effort. The biological assessment will be reviewed. Chuck Rafkind is the contact.

TITLE: Channel Island Fox Restoration
Region: Pacific West
Park: CHIS
Lead: Dratch
Completion: Ongoing
Description: The protection and restoration of Channel Island foxes is extremely complex. The Endangered Species Program is assisting Kate Faulkner, Tim Coonan and other park staff with various aspects of captive propagation and restoration efforts.

TITLE: Cooperative Agreements for Genetic Analyses
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: October 2003
Description: The Cooperative Agreement with the University of Montana is being utilized to do species determination from the hairs of forest carnivores. A Cooperative Agreement is needed with the California CESU when it is established to provide ongoing genetic analyses of island foxes and ecological genetic analyses of samples.

TITLE: T&E Analysis of Fire Plan
Region: Intermountain
Park: MEVE
Lead: Mehrhoff
Completion: November 2002
Description: Mesa Verde National Park is undertaking a new Fire Management Plan. The park has requested assistance in analyzing the effects of the plan on endangered species. The Program will provide that assistance to George San Miguel.

TITLE: Partners for Amphibian and Reptile Conservation (PARC)
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: Ongoing
Description: Participate in the PARC Federal Steering Committee during semi-annual meetings.

TITLE: International Association of Fish & Wildlife Agencies (IAFWA)
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: Ongoing
Description: Work with IAFWA staff (primarily represents the interests of state natural resource agencies) to integrate important NPS. Serve on IAFWA committees such as T&E Species and Science and Research.

TITLE: MOU with NatureServe
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: September 2003
Description: NatureServe has significant information on the biodiversity found in National Parks. This MOU is intended to facilitate information exchange between NPS and NatureServe.

TITLE: Endangered Species Expenditure Report for U.S. Fish & Wildlife Service
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: January 2003
Description: Track and report annual NPS expenditures on federally listed species. NPS is tasked with submitting this report to the USFWS.

TITLE: DOI Inspector General (IG) Audit of Endangered Species GPRA Goals
Region: Servicewide
Park: Servicewide
Lead: Mehrhoff
Completion: August 2003
Description: The DOI IG is conducting an audit of the NPS's Endangered Species GPRA goal. The Program will need to assemble data and search archives to facilitate this audit.

TITLE: Marine Mammal Commission (MMC) Report
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: August 2003
Description: Summarize federally funded research conducted in the National Parks for the MMC for their annual report to Congress. The Program will utilize the NPS Investigators Report to compile the initial list of projects and funds expended. Initial compilation will be verified by regions for accuracy.

TITLE: Assist in the Development of a Conservation Agreement for Vernal Springs Endemic Invertebrates
Region: PWR
Park: DEVA
Lead: Mehrhoff
Completion: September 2003
Description: Assist DEVA in developing a conservation agreement for aquatic invertebrates with the USFWS and a monitoring plan to support the conservation agreement. Program staff will provide an outline to DEVA of recommended approaches to developing a conservation agreement and describe key issues to address in the agreement. Program staff will also visit with WHIS staff and cooperators if needed.

TITLE: Assist in the Development of a Conservation Agreement for *Puccinellia howellii*
Region: PWR
Park: WHIS
Lead: Mehrhoff
Completion: September 2003
Description: Assist WHIS in developing a conservation agreement for *Puccinellia howellii*. Program staff will provide an outline to WHIS of recommended approaches to developing a conservation agreement and describe key issues to address in the agreement. Program staff will also visit with WHIS staff and cooperators if needed.

TITLE: Review Draft T&E Species Compliance Strategy
Region: PWR
Park: YOSE
Lead: Mehrhoff/Dratch
Completion: March 2003
Description: Review draft procedures for complying with ESA consultation.

TITLE: Determine Research Needs for Utah Prairie Dog
Region: IMR
Park: BRCA
Lead: Mehrhoff/Dratch
Completion: September 2003
Description: Assist the park in determining research needs for Utah prairie dog and assist in developing a management plan for this species.

TITLE: Review of Stocking of Birds, Mammals and Fish
Region: Servicewide
Park: Servicewide
Lead: Dratch
Completion: Ongoing
Description: Work on the Fund for Animals FOIA to determine the amount of stocking that is occurring of non-fish species, and with parks that received the Fund for Animals Questionnaire on Stocking. Participate in the EIS developments to address mountain lakes fish stocking in the NOCA, particularly the effect of trout on listed species.

TITLE: Assist in the Development of a Research Program and Long-term Monitoring of Bald Eagles and Sensitive Joint Vetch
Region: NER
Park: COLO
Lead: Mehrhoff
Completion: September 2003
Description: Assist COLO in determining research needs and objectives for a long-term ecological monitoring program for bald eagles and sensitive joint vetch.

TITLE: Review Mexican Spotted Owl Survey Proposal
Region: IMR
Park: MEVA
Lead: Dratch
Completion: September 2003
Description: Evaluate survey proposal for Mexican spotted owl considering successful efforts at GRCA and the extensive survey activities on the Northern spotted owl at OLYM.

TITLE: Provide Technical Review and Guidance on Endangered Species Issues Associated with Oil and Gas Development
Region: IMR
Park: PAIS
Lead: Dratch/Mehrhoff
Completion: September 2003
Description: Review and comment on park-generated study proposals, environmental documents, legal issues, biological assessments, and the interpretation of NPS policies, particularly assisting on consultation with the USFWS.

TITLE: Review Conservation Genetics Analyses
Region: IMR, SER and PWR
Park: GRCA, GUIS, DEVA
Lead: Dratch
Completion: September 2003
Description: Advise Parks on genetic analyses that precede reintroduction efforts to ensure that substantial genetic variation is not lost. Projects include management of mountain lions at GRCA, reestablishment of plants after hurricanes at GUIS, and minimizing genetic loss of rare alleles of pupfish in established refugia.

WILDLIFE MANAGEMENT PROGRAM

ANNUAL WORKPLAN: FY 2003

PERSONNEL:

Michael Coffey	Wildlife Biologist
Margaret A. Wild	Wildlife Veterinarian
Jenny Powers	Wildlife Veterinarian, Colorado State Univ.
Kevin Castle	Wildlife Veterinarian STEP Student

GOALS AND FUNCTIONS:

The wildlife program addresses issues of wildlife management with particular emphasis on wildlife health, native and exotic species management, and animal capture. The program's goal is to provide technical expertise that will support wildlife management actions of Regions, Support Offices, Clusters, and Parks. The program provides consultation, technical assistance, and training to NPS personnel and addresses service-wide wildlife management issues through policy review and development.

SERVICES:

The Wildlife Program provides the following services:

- Servicewide policy development, guidance, and interpretation
- Review and interpretation of new regulations, executive orders, and directives
- Liaison with other federal and state agencies and national organizations on wildlife health and wildlife management issues
- Management of BRMD Competitive funding program
- Training on wildlife field anesthesia and capture and wildlife disease investigation
- Veterinary diagnostic services and disease investigation services.
- Technical Assistance to Regions and Parks, include:
 - Review of wildlife anesthesia, capture, and handling protocols
 - Wildlife anesthesia, capture, removal, and translocation
 - Eradication and/or removal of exotic animal species
 - Consultation on animal overabundance and control
 - Wildlife health monitoring programs
 - Review of animal welfare issues

PROJECTS AND TASKS:

TITLE: Inter-Regional White-Tailed Deer Working Team
Region: Servicewide
Park: Servicewide
Lead: Coffey
Completion: Ongoing
Description: The Working Team is made up of white-tailed deer subject matter experts from 4 regions. The team assists parks in developing management goals/objectives and in designing and implementing monitoring and inventory programs to assess impacts of white-tailed deer on park resources.

TITLE: Aerial, Capture, Eradication, and Tagging of Animals
Region: Inter-Agency
Park: Inter-Agency
Lead: Coffey
Completion: Ongoing
Description: Serves as subject-matter expert to the DOI, USFS, and OAS on the use of aircraft to capture, eradicate, herd, and tag animals. Develop training and certification standards, provide training, and conduct aerial check rides for pilots and gunners.

TITLE: DOI Committee for the use of firearms by non-law enforcement personnel
Region: Department-wide
Park: Department-wide
Lead: USGS, NPS representative: Coffey
Completion: Ongoing
Description: NPS representative to the DOI Committee to establish standards and qualifications for the use of firearms by non-law enforcement personnel.

TITLE: Manage BRMD Competitive Call
Region: Servicewide
Park: Servicewide
Lead: Coffey
Completion: June 2003
Description: BRMD commits approximately \$950,000 of competitive funding annually to parks for biological and natural resource projects. Projects are limited to 2 years and not to exceed \$50,000 per project. Serve as Program Manager for the BRMD Competitive Projects ensuring accomplishment reports, implementation plans and final report are completed and reviewed. There are fifteen continuing projects in FY03 and twenty-five new starts totaling \$961,500.

TITLE: Technical Assistance in Wildlife Management and Wildlife Capture
 Region: Servicewide
 Park: Servicewide
 Lead: Coffey
 Completion: Ongoing
 Description:

- Aerial Capture of Golden Eagles at Santa Cruz Island, CHIS. Serve as Project Helicopter Manager and Gunner for aerial capture involving approximately 25 personnel. Completion Date: Oct. 2002
- Wildlife Management Issues, ANTI. Conduct a site visit to assist the park in developing a wildlife management program that can be intergraded into a park with historical/cultural mandates Completion Date: Dec. 2003
- Conduct site visit to GUMO to assist the park in developing research and management proposals that will aid in assessing herd vigor, habitat capacity and in developing an elk management plan and associated environmental assessment. Completion Date: Sept. 2003
- Provide technical assistance to SLBE in developing a proposal for flying squirrel population assessment, distribution, and suitable habitat determination for these species. Completion Date: Sept. 2003
- Assist REDW and PWR Aviation Manager in preparing an Operational and Aviation Plan for the ground and aerial capture of elk at Redwood National and State Parks. Completion Date Dec. 2002

TITLE: Serve as COTR on Task Agreements with Colorado State University.
 Region: Servicewide
 Park: Servicewide
 Lead: Wild
 Completion: Ongoing
 Description: BRMD has two Task Agreements with CSU: 1) for veterinary diagnostic services and 2) to provide a chronic wasting disease coordinator for NPS units. NPS will work closely with CSU to ensure that details of the agreements are met, particularly in respect to hiring and guiding work of the chronic wasting disease coordinator.

TITLE: Veterinary Assistance with Field Anesthesia of Bighorn Sheep at Glacier National Park
 Region: Intermountain
 Park: GLAC
 Lead: Powers
 Completion: April 2003
 Description: USGS-BRD researchers require veterinary assistance for capture of bighorn sheep for a study at Glacier National Park.

TITLE: Veterinary Assistance or Consultation on Wildlife Anesthesia and Sampling Needs
Region: Servicewide
Park: Servicewide
Lead: Wild
Completion: Ongoing
Description: Provide consultation, assistance, or training on wildlife anesthesia and sampling as requested by NPS units, including:

- Redwoods NP has requested assistance on veterinary and anesthetic aspects of elk capture. Completion Date: March 2003.
- Rocky Mountain NP has requested consultation on sampling bighorn sheep. Completion Date: March 2003
- Colorado NM has requested assistance on bighorn sheep capture and sampling. Completion Date: February 2003
- Shenandoah NP has requested assistance with their wildlife anesthesia procedures. Completion Date: September 2003
- Mesa Verde NP has requested assistance with wild horse anesthesia. Completion Date: June 2003
- Co-Instruct with Michael Coffey a Field Anesthesia Class for personnel from Rocky Mountain National Park and Wind Cave National Park. Each park has NRPP projects for chronic wasting disease starting in FY03 which will require field anesthesia of deer and elk. Completion Date: November 2002

TITLE: Provide Veterinary Diagnostic Services to Parks.
Region: Servicewide
Park: Servicewide
Lead: Wild
Completion: Ongoing
Description: Health monitoring is an important component of wildlife management programs in parks.

Tasks:

- Provide veterinary diagnostic services as needed to parks through a CESU agreement with Colorado State University or assist parks in locating and coordinating with other veterinary diagnostic laboratories
- Input health data into newly developed database for compiling results of information collected using these diagnostic services
- Investigate disease outbreaks as they occur in NPS units
- Provide training to CAVE, WICA, and other interested NPS units on wildlife disease investigation, necropsy techniques, and sample collection
- Provide assistance on investigations into contaminants in wildlife to CAVE, GRCA, and other interested NPS units

TITLE: Technical Assistance with Developing and Implementing Surveillance and Management Programs for Chronic Wasting Disease in NPS Units Where the Disease has been Detected

Region: Intermountain and Midwest

Park: ROMO and WICA

Lead: Powers, Wild

Completion: Ongoing

Description: Chronic wasting disease (CWD) is a transmissible spongiform encephalopathy of cervids (deer and elk). ROMO and WICA are the only NPS units known to have CWD-positive cervids.

Tasks:

- Provide training on tonsillar biopsy for CWD surveillance in deer to staff at ROMO and WICA. Completion Date: April 2003
- Assist in developing CWD surveillance and management programs at ROMO and WICA. Completion Date: Ongoing
- Provide diagnostic services for CWD surveillance. Completion Date: Ongoing
- Assist in writing CWD section of elk EIS at ROMO. Completion Date: September 2003
- Assist in preparation of informational material for visitors. Completion Date: September 2003

TITLE: Chronic Wasting Disease Surveillance in NPS Units Where CWD Has Not Yet Been Detected

Region: Servicewide

Park: Servicewide

Lead: Powers

Completion: Ongoing

Description: Because the geographic distribution of CWD has not yet fully elucidated, NPS units need to determine level of risk and implement appropriate CWD surveillance. Guidance on planning (e.g., at GRSM) and implementation (e.g., at GETT) will be provided as needed to NPS units.

TITLE: Provide Training on Performing Tonsillar Biopsy to Staff at White Sands Missile Range

Region: Intermountain and Interagency

Park: WHSA

Lead: Powers

Completion: December 2002

Description: White Sands Missile Range, located adjacent to WHSA, recently detected CWD in a deer. As a collaborative interagency approach to CWD management, BRMD will provide training to White Sands Missile Range staff on performing tonsillar biopsy on deer.

TITLE: Technical Assistance on Veterinary Aspects of Contraception Evaluation in Elk
Region: Intermountain
Park: ROMO
Lead: Wild
Completion: Ongoing
Description: Rocky Mountain National Park, as well as some other parks, may benefit from development of a safe and effective contraceptive agent for cervids. Provide veterinary expertise and support to research projects evaluating a contraceptive (GnRH agonist) in captive and field settings.

TITLE: Technical Assistance on Veterinary Aspects of Safety Testing Strain RB-51 Vaccine in Captive Pregnant Pronghorn Does
Region: Intermountain
Park: YELL
Lead: Wild
Completion: September 2003
Description: Yellowstone National Park will soon begin vaccinating bison against brucellosis using strain RB-51. YELL is concerned about the safety of RB-51 in non-target species, including their declining pronghorn population. Provide veterinary and animal handling expertise to support a cooperative project with APHIS-Veterinary Services to test the safety of RB-51 vaccine in captive pregnant pronghorn does.

TITLE: Work with NPS Public Health Program to Assess Health Threat Associated with Western Gulls at Golden Gate National Recreation Area
Region: Pacific West
Park: GOGA
Lead: Wild
Completion: September 2003
Description: Assistance will be provided to GOGA by working with NPS Public Health Program to assess the potential threat of western gulls and provide management alternative to address these threats.

TITLE: Chair Session on Wildlife Diseases for the George Wright Society Meeting
Region: Servicewide
Park: Servicewide
Lead: Wild
Completion: April 2003
Description: Organize and solicit abstracts for a session on Addressing Wildlife Diseases in the National Parks.

TITLE: Host Meeting of Consortium on Remote Delivery of Biologics to Free-Ranging Wildlife
Region: Intermountain
Park: YELL
Lead: Wild
Completion: February 2003
Description: This 1-day meeting is a follow-up to the BRMD-sponsored Ballistics Workshop held January 2002. The purpose is to continue communication and collaboration between representatives from each area of expertise that is addressing the need for ballistic delivery of biologics to wildlife.

TITLE: Host Workshop on Management of Microbes in the Context of the NPS Mission - coordinate with Colorado State University (CSU)
Region: Servicewide
Park: Servicewide
Lead: Wild
Completion: July 2003
Description: Coordinate with CSU to host a workshop to review the state of the science and solicit expert opinions on the biological practicality of, and possible alternatives to, using native vs. exotic status as a primary decision-making tool for determining NPS management actions regarding microbes.

TITLE: Assist USGS-BRD National Wildlife Health Center (NWHC) in Planning and Implementing a CWD Surveillance Workshop
Region: Servicewide
Park: Servicewide
Lead: Wild
Completion: May 2003
Description: Scientifically-based approaches for CWD surveillance are needed by NPS in addition to other federal, state, and tribal agencies. BRMD will collaborate with NWHC in planning, implementing, and publishing recommendations from the workshop.

TITLE: Complete Draft of Reference Manual (RM) 77-4
Region: Servicewide
Park: Servicewide
Lead: Wild
Completion: September 2003
Description: This RM section describes training requirements for individuals using pharmaceuticals in wildlife in units of the NPS and details regulatory requirements for proper drug storage, use, disposal, and record keeping. The RM will include a draft task book produced by Elaine Leslie while on detail with BRMD in FY2002.

TITLE: Complete Draft Manuscripts on Research Projects that Would Benefit Wildlife Management in NPS Units
 Region: Servicewide
 Park: Servicewide
 Lead: Wild
 Completion: September 2003
 Description: Prior to employment with NPS, research projects were completed but results were not published on several projects that could benefit wildlife management in NPS units.
 Tasks: Complete draft manuscripts as lead or co-author on:

- Heart rate as a predictor of acute stress in bighorn sheep
- Efficacy of GnRH agonist (luprolide) on reproduction and behavior in female wapiti and deer
- Efficacy of lufenuron for control of fleas in white-tailed prairie dogs
- Health aspects of reintroduction of Canada lynx to Colorado

TITLE: Provide Recommendations on CWD Policy and Management
 Region: Servicewide
 Park: Servicewide
 Lead: Wild
 Completion: Ongoing
 Description: Represent NPS on interagency workgroups addressing CWD. Provide technical info and recommendations on policy to NPS and DOI decision-makers.

TITLE: Provide Veterinary Consultation on Policy and Management of Brucellosis in the Greater Yellowstone Area (GYA)
 Region: Intermountain
 Park: YELL, GRTE
 Lead: Wild
 Completion: Ongoing
 Description: Provide technical information on policy and management of brucellosis in the GWA to NPS and DOI decision-makers

TITLE: Review Proposed Legislation and Draft Federal Plans Regarding Animal Health
 Region: Servicewide
 Park: Servicewide
 Lead: Wild
 Completion: Ongoing
 Description: Timely review and comment on proposed federal documents regarding animal health issues will be provided and briefing statements will be prepared, as needed, to summarize information.

TITLE: Prepare Review on Florescent Polarization Assay (FPA) for Diagnosis of Brucellosis
Region: Intermountain
Park: YELL
Lead: Wild supervise a veterinary student STEP
Completion: February 2003
Description: USDA-APHIS Veterinary Services is suggesting that a new test, FPA, be used to determine brucellosis status, and therefore fate of bison, at Yellowstone National Park. YELL requires a critical review of available information and data to determine the acceptability and potential population impacts of implementation of the FPA in bison screening.

TITLE: Review Disease Section of Bison and Elk Management EIS
Region: Intermountain
Park: GRTE
Lead: Wild
Completion: September 2003
Description: Disease and disease management options are an important component of an EIS being prepared for bison and elk management at GRTE and the National Elk Refuge. Assistance will be provided by serving on expert panels for review of alternatives and reviewing the disease portion of the draft EIS.

TITLE: Represent NPS in the United States Animal Health Association (USAHA)
Region: Servicewide
Park: Servicewide
Lead: Wild
Completion: Ongoing
Description: USAHA is a group of primarily regulatory veterinarians representing state and federal agencies. NPS representation is needed at the annual USAHA meetings and on USAHA committees (e.g., Wildlife Disease Committee, Foreign Animal Disease Committee).

TITLE: Provide Technical Guidance to PhD SCEP on Deer Management Project
Region: Northeast
Park: Regionwide
Lead: Wild
Completion: Ongoing
Description: The BRMD, Northeast Region, and Cornell University are collaborating on a project to investigate deer management issues in eastern NPS units. BRMD will serve as the NPS technical contact for a Cornell PhD student working on this project as a SCEP employee.

PARK FLIGHT MIGRATORY BIRD PROGRAM

ANNUAL WORKPLAN: FY 2003

PERSONNEL:

Gary Johnston
Carol Beidleman

Program Manager
Contractor - Program Coordinator

GOALS AND FUNCTIONS:

The Park Flight Migratory Bird Program works to protect shared migratory bird species and their habitats in both U.S. and Latin American national parks and protected areas. The program develops bird conservation and education projects and creates opportunities for technical exchange and cooperation. Park Flight is a partnership between NPS, National Park Foundation, American Airlines, National Fish & Wildlife Foundation, U.S. Agency for International Development, and the University of Arizona. The program is made possible through the generous support of American Airlines and the NPS Natural Resource Challenge. Technical direction is provided through the University of Arizona Desert Southwest Cooperative Ecosystem Studies Unit and NPS Biological Resource Management Division.

In FY03, Park Flight concluded a second year of funding for seven bird conservation and education projects in thirteen U.S. national parks, and in protected areas in Guatemala, El Salvador, Nicaragua, Honduras, Panama, and Mexico. During FY03, these existing projects will have the opportunity to apply, on a competitive basis, for an additional year of continuation funding.

The involvement of Mesoamerican internships in U.S. national park projects will continue in FY03, as will the provision of technical assistance by NPS employees to Mesoamerican projects. These technical exchanges will be coordinated through the NPS Office of International Affairs International Volunteer in Parks program.

Park Flight will be expanding its portfolio of sites in FY03 to include a South American project, linked through long-distance migrants to a new U.S. national park project. This will be coordinated through the NPS Office of International Affairs in conjunction with the National Fish and Wildlife Foundation.

In FY03 the Park Flight Program held its second grantee workshop, at Pico Bonito National Park in Honduras. The goal of the workshop was to improve knowledge and coordination of migratory bird monitoring programs in U.S. national parks and

counterpart protected areas of the Mesoamerican region, and to help integrate monitoring and education efforts. The workshop also provided an opportunity for Park Flight grantees from U.S. and Mesoamerican national parks and protected areas to build relationships for collaboration on migratory bird conservation.

During FY03 the Park Flight Program was featured in *NPS Natural Resource Year in Review – 2002*. Additional opportunities will be sought for publicity in FY03, including *National Parks* magazine. A number of presentations on Park Flight will be given at national and international meetings in FY03, including at the University of Arizona, Pan-American Roundtable, and George Wright Society.

Under the umbrella of Park Flight, NPS has worked with the U.S. Fish and Wildlife Service to produce a final draft in FY03 of the Memorandum of Understanding required by Executive Order 13186 for the protection of migratory birds. This MOU should be signed early in 2003. NPS also continues to contribute to the efforts of Partners in Flight and the North American Bird Conservation Initiative, attending national and international meetings, chairing the Partners in Flight Federal Agency Committee, and supporting and distributing International Migratory Bird Day materials.

PROJECTS AND TASKS:

TITLE: Park Flight Migratory Bird Program
Region: Servicewide
Park: Servicewide
Lead: Johnston, Beidleman
Completion: September 2003
Description: Manage and Coordinate with Parks, National Park Foundation, National Fish and Wildlife Foundation and others on the development of migratory bird management activities between US Parks and selected protected areas in Mesoamerica

TITLE: Coordinate and track existing U.S. Park Flight Projects
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Spring 2003
Description: Coordinate the seven U.S. Park Flight projects, and track their progress towards completion and final reporting in Spring 2003. Provide program guidance and technical assistance as necessary.

TITLE: Develop and coordinate RFP for 2003 U.S. Park Flight Projects
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: March 2003
Description: Work with Park Flight Program partners to develop the Request for Proposals for the 2003 Park Flight continuation grants for existing U.S. projects. Complete the RFP for release through the National Park Foundation in December 2002. Review proposals received and announce selections in March 2003.

TITLE: Coordinate and track 2003 U.S. Park Flight Projects
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Ongoing
Description: Coordinate the implementation of U.S. Park Flight projects selected for 2003 continuation grants, and track their project towards completion. Provide program guidance and technical assistance as necessary.

TITLE: Coordinate and track existing Mesoamerican Park Flight Projects
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Spring 2003
Description: Work with the National Fish and Wildlife Foundation to track the completion of the existing six Park Flight Mesoamerican Projects.

TITLE: Coordinate with NFWF on RFP for 2003 Mesoamerican Park Flight Projects
Region: Mesoamerica
Park: Mesoamerica
Lead: Beidleman
Completion: Spring 2003
Description: Coordinate with the National Fish and Wildlife Foundation and other Park Flight Program partners to develop the RFP for the 2003 Park Flight continuation grants for existing Mesoamerican projects. Review proposals received and announce selections.

TITLE: Coordinate and track 2003 Mesoamerican Park Flight Projects
Region: Mesoamerica
Park: Mesoamerica
Lead: Beidleman
Completion: Ongoing
Description: Coordinate with the National Fish and Wildlife Foundation on the implementation of the Mesoamerican Park Flight projects selected for 2003 continuation grants, and track their project towards completion. Provide program guidance and technical assistance as necessary.

TITLE: Coordinate technical assistance for 2003 Mesoamerican Park Flight Projects
Region: Servicewide/Mesoamerica
Park: Servicewide/Mesoamerica
Lead: Beidleman
Completion: Ongoing
Description: Coordinate with the National Fish and Wildlife Foundation to determine the 2003 needs for technical assistance for the continuing Mesoamerican Park Flight Projects. Work with NFWF and the NPS Office of International Affairs on the selection of these individuals, and coordinate the necessary paperwork for their placement.

TITLE: Coordinate international internships for 2003 U.S. Park Flight Projects
Region: Servicewide/Mesoamerica
Park: Servicewide/Mesoamerica
Lead: Beidleman
Completion: Ongoing
Description: Coordinate with the National Fish and Wildlife Foundation and NPS Office of International Affairs to select and place Mesoamerican candidates for international internships in the U.S. Park Flight projects.

TITLE: Develop and coordinate RFP for new South American/Alaska Park Flight Project
Region: Alaska Region/South America
Park: Alaska Region/South America
Lead: Beidleman
Completion: Spring 2003
Description: Work with the NPS Office of International Affairs and other Park Flight Program partners to develop the concept, location, and RFP for the new South American project and connected U.S. project (Alaska). Facilitate the selection process for the U.S. component of this RFP, and work with the National Fish and Wildlife Foundation on the selection process for the South American component of this RFP.

TITLE: Coordinate and track new South American/Alaska Park Flight Projects
Region: Alaska Region/South America
Park: Alaska Region/South America
Lead: Beidleman
Completion: Ongoing
Description: Coordinate with the NPF Office of International Affairs and the National Fish and Wildlife Foundation on the implementation of the new South American and Alaska projects. Provide program guidance and technical assistance as necessary.

TITLE: Coordinate and conduct Honduras Park Flight grantee workshop
Region: Servicewide/Mesoamerica
Park: Servicewide/Mesoamerica
Lead: Beidleman
Completion: November 2002
Description: Coordinate with the National Fish and Wildlife Foundation and other program partners on planning and conducting the Park Flight grantee workshop in Honduras on bird monitoring networks and the integration of monitoring and education. Coordinate with the NPS Office of International Affairs to complete all necessary international travel clearance paperwork. Process reimbursements and workshop invoice.

TITLE: Continue as the NPS Partners in Flight Liaison
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Ongoing
Description: Attend and represent NPS at national and international Partners in Flight meetings, and provide an exchange of information from NPS to PIF, and from PIF to NPS. Meet all responsibilities expected of the PIF Liaison position.

TITLE: Continue as the NPS International Migratory Bird Day Liaison
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Ongoing
Description: Communicate systemwide within NPS regarding the 2003 IMBD theme, materials, and activities. Provide financial support for the 2003 IMBD poster and education booklet, with the NPS logo. Send the 2003 IMBD catalog, poster and education booklet to all NPS units. Solicit support from OIA for Spanish IMBD materials and their distribution. Encourage park participation in and registry of IMBD events.

TITLE: Assist with the development and pursuit of funding sources for Park Flight
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Ongoing
Description: Assist in developing and pursuing sources of funding for the Park Flight Program, including assessing NPS funding needs for bird conservation for the Wildlife Management Institute, submitting a Neotropical Migratory Bird Conservation Act proposal, and obtaining funding from the Inventory and Monitoring Network and VIP program.

TITLE: Support of Partners in Flight Bird Conservation Magazine
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Ongoing
Description: Provide financial support for the Partners in Flight Bird Conservation magazine, and mailing labels to the American Bird Conservancy so issues can be sent to all NPS units and offices.

TITLE: Continue and expand relationship with American Birding Association
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Ongoing
Description: Provide financial support for the American Birding Association Opportunities for Birders Catalog 2003 (with NPS logo), and provide for the distribution of the catalog to all park units. Facilitate efforts by the Birder's Exchange to courier optics and other materials to ornithologists in Mesoamerica. Explore the expansion of the NPS/ABA relationship, and ascertain shared priorities for the relationship to proceed on.

TITLE: Represent NPS at Partners in Flight Western Working Group Meetings
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: October 2002, May 2003
Description: Attend and represent NPS at Partners in Flight Western Working Group meetings, giving updates on Park Flight and networking with partners. For FY03, these will include an international meeting in Whitehorse, Yukon, October 2002, to discuss trinational NABCI projects, and a meeting in Cheyenne, Wyoming, May 2003.

TITLE: Represent NPS at Partners in Flight Management Steering Committee Meetings
Region: Servicewide
Park: Servicewide
Lead Beidleman
Completion: March and September 2003
Description: As a member of the steering committee, attend and represent NPS at the Partners in Flight Management Steering Committee meetings in North Carolina in March 2003 and in Wisconsin in September 2003. The March meeting will entail a strategic planning session for Partners in Flight. Meet all responsibilities expected of steering committee members.

TITLE: Represent NPS at the 68th North American Wildlife and Natural Resources Conference and annual International Association of Fish and Wildlife Agencies meeting
Region: Servicewide
Park: Servicewide
Lead Beidleman
Completion: March and September 2003
Description: Attend and represent NPS at Partners in Flight and other meetings as part of the 68th North American Wildlife and Natural Resources Conference in North Carolina (March) and annual International Association of Fish and Wildlife Agencies meeting in Wisconsin (September). Both are in conjunction with the PIF Management Steering Committee meetings.

TITLE: Continue as Partners in Flight Federal Agency Committee Chair
Region: Servicewide
Park: Servicewide
Lead Beidleman
Completion: March and September 2003
Description: Chair the Partners in Flight Federal Agency Committee meetings held as part of the 68th North American Wildlife and Natural Resources Conference (North Carolina) and annual International Association of Fish and Wildlife Agencies meeting (Wisconsin). Meet all responsibilities expected as Chair of the PIF Federal Agency Committee.

TITLE: Ensure NPS representation at NABCI Federal Agency Committee
Region: Servicewide
Park: Servicewide
Lead Johnston/Beidleman
Completion: Ongoing
Description: Ensure NPS representation at NABCI Federal Agency Committee meetings, as scheduled.

TITLE: Give presentation at the University of Arizona
Region: Servicewide
Park: Servicewide
Lead Beidleman
Completion: December 2002
Description: Give a presentation on Park Flight as part of the University of Arizona School of Renewable Natural Resources fall seminar series in Tucson, Arizona, on December 4, 2002.

TITLE: Give presentation at the Pan-American Roundtable and NPS
Region: Servicewide
Park: Servicewide
Lead Beidleman
Completion: December 2002
Description: Give a presentation on Park Flight and represent NPS at the Partners in Flight Pan-American Roundtable hosted by The Nature Conservancy in Arlington, Virginia, on December 13, 2002. While in D.C., give a presentation on Park Flight at the NPS offices (brown bag).

TITLE: Give papers at the Biennial George Wright Society Conference
Region: Servicewide
Park: Servicewide
Lead Beidleman
Completion: April 2003
Description: Give two papers on the Park Flight Program at the 2003 Biennial George Wright Society Conference in San Diego, California, April 2003. The papers will be incorporated in two different sessions, one on migratory birds, the other in Ecological Restoration I/II.

TITLE: Teach bird seminar at Rocky Mountain National Park
Region: Servicewide
Park: Servicewide
Lead Beidleman
Completion: June 24-27, 2003
Description: Teach a seminar on birds of the Rocky Mountains for the Rocky Mountain Nature Association's Field Seminars Program at Rocky Mountain National Park.

TITLE: Attendance at professional ornithological meetings
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: April 2003, July 2003
Description: Represent NPS and Park Flight at the National Audubon Society's Important Bird Areas Conference in April 2003 in Texas. Represent NPS and Park Flight at the Society for the Conservation and Study of Caribbean Birds in Tobago, July 2003; determine if efforts with the new South American project can be coordinated with this meeting.

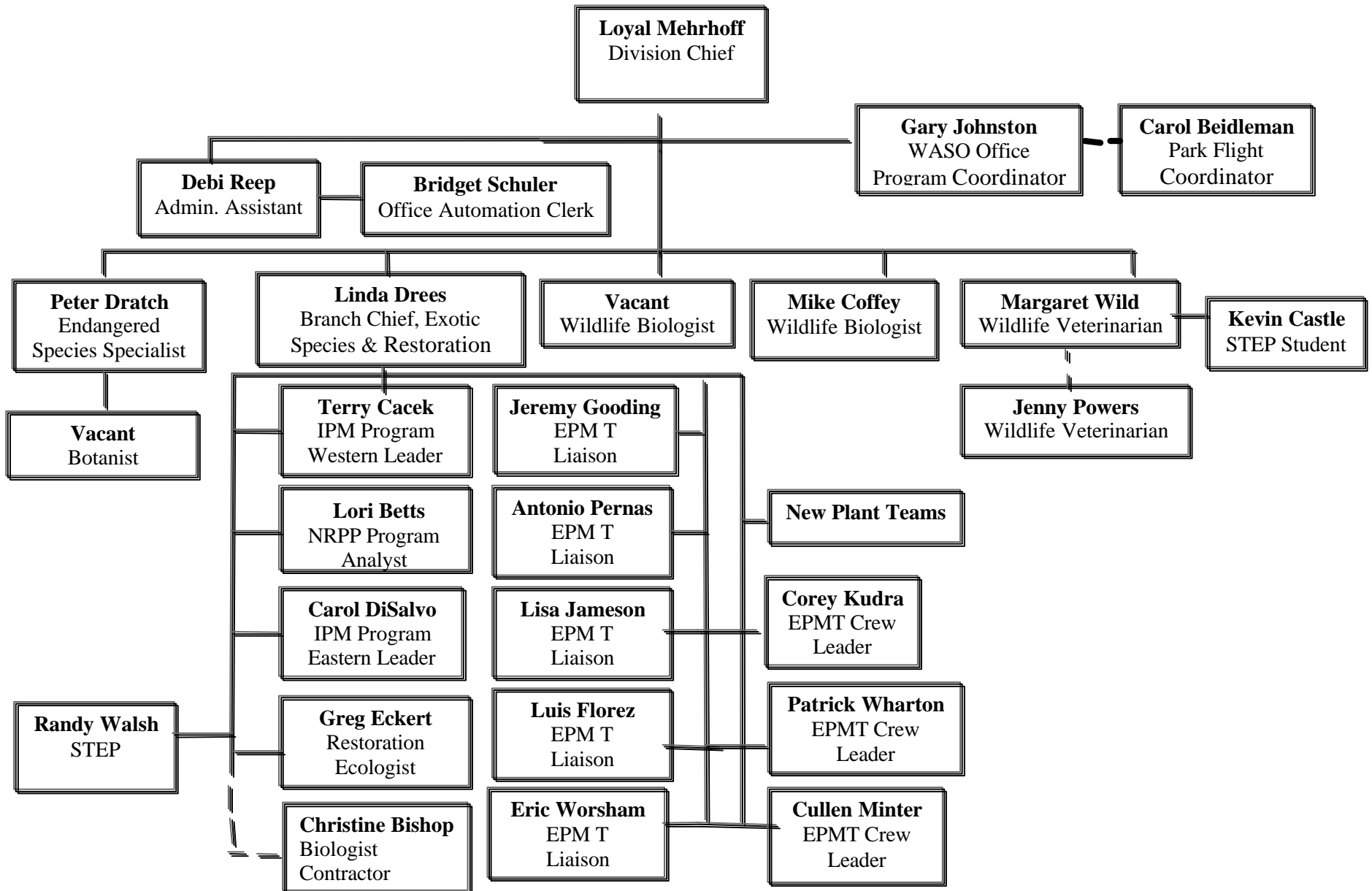
TITLE: Executive Order MOU with the U.S. Fish & Wildlife Service on the protection of migratory birds
Region: Servicewide
Park: Servicewide
Lead: Dratch/Beidleman
Completion: Spring 2003
Description: Work with Peter Dratch and Gary Johnston to complete draft for submission to Regional Directors; incorporate comments and send final draft for signing by the Director. Anticipate signing ceremony in Washington, D.C. in early 2003, with possible additional celebration in association with International Migratory Bird Day. This MOU outlines how NPS will conserve migratory birds on NPS lands, and addresses procedures for NPS take of migratory birds.

TITLE: Publish articles on Park Flight Program
Region: Servicewide
Park: Servicewide
Lead: Beidleman
Completion: Ongoing
Description: Seek opportunities to provide publicity for the Park Flight program through articles in magazines, newsletters, reports, websites, etc. Submit articles on Park Flight for the Natural Resource Year in Review 2002. Follow lead through NPS Office of International Affairs for article in National Parks Magazine.

APPENDICES

Appendix A - Division Organizational Chart

Biological Resource Management Division



Appendix B - Division Staff Background

Staff in the Immediate Office of the Division Chief

Loyal Mehrhoff, Division Chief

970.225.3592

loyal_mehrhoff@nps.gov

PhD Botany. More than 25 years work in endangered species and population ecology, primarily for FWS in Hawaii and the Pacific Northwest before joining BRMD in 2000.

Oversees division including program direction, budget and reporting. Responsible for national policy standards, understanding and interpreting legal issues and regulations, and providing sound scientific data to support park resource conservation efforts.

Gary Johnston, Washington Liaison

202.513.7175

gary_johnston@nps.gov

BS Chemistry, MS Biology. More than 20 years with NPS, including work as an editor/writer, managing the IPM and natural resource programs and joining BRMD in 1999.

Provides policy support and coordination of national and departmental biology-related initiatives, programs, and issues. Coordinates the Natural Resources Project Program. Serves as the NPS representative to the Federal Interagency Committee for the Management of Noxious and Exotic Weeds. Administers the Park Flight Migratory Bird Program.

Debi Reep, Administrative Assistant

970.225.3592

debi_reep@nps.gov

5 years experience with FWS before joining NPS in 1999.

Provides administrative support to the division, including procurement, payroll, and personnel, and monitoring budgets and funds, assisting with travel arrangements, and tracking orders and NPS property. Assists with desktop publishing efforts, including presentations and monthly reports.

Bridget Schuler, Clerk

970.267.2110

bridget_schuler@nps.gov

Freshman at Colorado State University, working towards a degree in Equine Science.

Provides administrative support to the division including, travel, filing, typing, and research.

Endangered Species Program Staff

Loyal Mehrhoff, Program Manager

970.225.3521

loyal_mehrhoff@nps.gov

PhD Botany. More than 25 years work in endangered species and population ecology, primarily for FWS in Hawaii and the Pacific Northwest before joining BRMD in 2000.

Focuses on the botanical side of the endangered species program and the administrative and policy elements of the program. Coordinates policy and budget, developing guidelines and management summaries for parks based on agreements, policies, and orders. Develops with partners the Endangered Species Database. Works to collect endangered plant seeds for the National Seed Storage Laboratory. Provides technical assistance to parks on botanical resource issues.

Peter Dratch, Endangered Species Specialist – Animals

970.225.3596

peter_dratch@nps.gov

PhD Population Genetics. More than 10 years working as a wildlife forensic scientist, including work at the Office of Scientific Authorization on CITES and international species as well as prosecution of trafficking and poaching on state and federal lands in Oregon. Joined BRMD in 2001.

Focus on the zoological side of the endangered species program. Works to connect scientists from around the US and the world with parks requiring expertise. Develops conservation agreements and MOUs with other federal and state agencies on key conservation issues. Serves as the liaison between the GAO and the parks on program audits. Updates public information on endangered species including brochures and website. Provides technical assistance to parks on zoological resource issues.

Wildlife Program Staff

Michael Coffey, Wildlife Biologist

970.225.3553

mike_coffey@nps.gov

BS Zoology. Almost 30 years experience with the government, including military service, and working in wildlife biology at both the park and headquarters levels for NPS.

Handles issues of wildlife management within the park system, including native and exotic species, wildlife management policy recommendations and development, review of park plans and interagency documents affecting park wildlife, and wildlife capture and eradication issues. Serves as the DOI subject matter expert for aerial capture of wildlife. Provides technical assistance to parks, including developing workshops and training, on all matters of wildlife management. Develops partnerships with other agencies and institutions working in wildlife management in parks. Oversees BRMD park program funding.

Margaret Wild, Wildlife Veterinarian

970.225.3593

margaret_wild@nps.gov

DVM; PhD Zoology. 8 years experience with the Colorado Division of Wildlife before joining BRMD in 2000.

Provides technical assistance, consultation, and training on wildlife health issues including anesthesia, health monitoring, preventative medicine, disease investigation, wildlife-livestock pathogen interactions, fertility control and animal welfare. Facilitates communication with states, other federal agencies, and professional organizations on wildlife health issues. Develops and reviews policy on animal health issues and veterinary drug use. Areas of expertise are infectious diseases of hoofstock and carnivores, with particular interest in chronic wasting disease of deer and elk, and assessing human disturbance to wildlife.

Jenny Powers, Wildlife Veterinarian Chronic Wasting Disease Coordinator
970.225.

jenny_powers@partner.nps.gov

DVM; Research Assistantship with Colorado State University before joining BRMD in 2003.

Provides Consultation and technical assistance to parks on Chronic Wasting Disease.

Kevin Castle, Veterinary Preceptor (STEP Student)

kevin_castle@contractor.nps.gov

MS Biology. Senior veterinary student at Colorado State University.

Prepare a White Paper on Evaluation of Diagnostic Techniques for *Brucella abortus*.

Park Flight Migratory Bird Program

Program Staff

Carol Beidleman, Park Flight Migratory Bird Program Coordinator

970.586.3776

beidlemanc@aol.com

MS Renewable Natural Resources Studies. More than 25 years of experience, including NPS seasonal and permanent supervisory interpretive park ranger at Rocky Mountain National Park (1976-1990), five years with The Nature Conservancy as Phantom Canyon Preserve Manager and Northeast Colorado Program Manager, involvement with Partners in Flight since 1993, State Chair of Colorado Partners in Flight since 1995, two years on staff of Rocky Mountain Bird Observatory as facilitator/author of Colorado Partners in Flight Bird Conservation Plan, two years on State Board of Directors for Audubon Colorado. Joined BRMD in 2000.

Works with Park Flight Program partners and grantees to facilitate Park Flight projects, technical assistance exchanges, international internships, and workshops in U.S National Parks and Mesoamerican parks and protected areas. NPS Liaison to Partners in Flight and International Migratory Bird Day. Chair of the Partners in Flight Federal Agency Committee.

Exotic Species & Ecological Restoration Branch

Branch Staff

Linda Drees, Branch Chief

970.225.3595

linda_drees@nps.gov

JD Environmental Law, MS Fish & Wildlife Management. Experience in local, state, and federal resource management including 10 years with the FWS. Legal experience included stints as a law clerk for the US Attorney's Office and Native American Program in Portland, OR, and later as a criminal prosecutor and hearings officer for the State of Colorado.

Responsible for administration, budget development and policy direction for branch including EPMT teams, IPM program, and ecological restoration activities. Reviews and formulates policy, standards and plans regarding invasive species and restoration for national program.

NRPP Program

Lori Betts, Program Analyst (2/2003 – current)

970.267.2103

lori_betts@nps.gov

Tracks status of Natural Resource Preservation Projects and BRMD funded projects and spending. Provides support to BRMD, particularly with funded projects in parks and integrated pest management as related to invasive plants. Serves as BRMD representative to the Natural Resource Web Team and maintains BRMD web-based information.

Summer Alger-Schulz, Biologist/ Program Analyst (7/2000 – 2/2003)

970.267.2103

summer_alger-schulz@nps.gov

BS Range Management, MS Agronomy - Weed Science. Joined BRMD in 2000.

Tracks status of Natural Resource Preservation Projects and BRMD funded projects and spending. Provides support to BRMD, particularly with funded projects in parks and integrated pest management as related to invasive plants. Serves as BRMD representative to the Natural Resource Web Team and maintains BRMD web-based information.

Ecological Restoration

Gregory Eckert, Terrestrial Restoration Ecologist

970.225.3594

greg_eckert@nps.gov

PhD Ecology. Twenty years of experience in conservation land management and policy development with US Peace Corps, EPA, and The Nature Conservancy before joining BRMD in 2000.

Works with the Fire Management Program Center on integrating fire and resource management. Provides technical assistance to parks on ecological issues related to disturbance assessment and restoration planning and implementation.

Randy Walsh, STEP Student

BS Forestry, Student at Colorado State University working on a MS in Forestry

Works in Fire Ecology

Integrated Pest Management

Terry Cacek, IPM Coordinator - West

970.225.3542

terry_cacek@nps.gov

PhD Wildlife Biology. More than 25 years in government, including the US Army Corps of Engineers, US military, and USAID, before joining NPS.

Assists with pest management issues affecting operations, concessions, cultural resources and visitor safety in all park units. Refines and updates the Pesticide Use Proposal (PUPs) web-based system for submission of pest control requests and usage by parks. Administers Forest Health Program to coordinate park proposals for insect and disease control with the US Forest Service.

Carol DiSalvo, IPM Coordinator - East

202.215.7183

carol_disalvo@nps.gov

BS Environmental Science, Entomology. Involved in integrated pest management since its beginning in 1981 and with NPS since 1991.

Assists with pest management issues affecting operations, concessions, cultural resources and visitor safety. Conducts training for NPS personnel in IPM principles and various workshops on timely pest issues. Liaises with other federal agencies for cooperative

efforts on pest management issues. Works to find new low-risk and integrated alternatives for controlling invasive pests.

Christine Bishop, Biologist Contractor

970.225.3594

christine_bishop@nps.gov

BS Wildlife Biology. MS Range Management.

Assists with reports, writes proposals, performs literature searches, and reports on various subjects including invasive species and restoration. Provides technical assistance to staff on Range Ecology.

Appendix C - BRMD/ NRPP Project Coordination by Division Staff

Table 1. Biological Resource Projects Managed Through the BRMD Funding Source During FY 2003.

Coord	Project	Region	Park	PMIS	Title
Coffey	BR-02-02	AKR	LACL	44975	Improve a census techniques for a harvested population of moose
Coffey	BR-03-06	AKR	LACL	65801	Assess dynamics of a harvested, low density population of Dall sheep
Coffey	BR-03-15	AKR	WRST	41826	Determining the status and distribution of mountain goats
Coffey	BR-02-01	IMR	BAND	38807	Develop wilderness stewardship plan
Coffey	BR-02-17	IMR	BAND	72641	Monitor ecosystem conditions baseline wilderness plan EIS
Mehrhoff	BR-02-06	IMR	BIBE	72122	Implement conservation agreement 2 candidate plant species
Eckert	BR-02-11	IMR	CANY	74319	Salt Creek invertebrates
Coffey	BR-03-18	IMR	CAVE	69482	Prepare management plan with NEPA compliance for non-native Barbary sheep
Coffey	BR-03-04	IMR	CORO	86502	Conservation and management of jaguars, mountain lions and other Felids in 4 S. AZ parks
Dratch	BR-03-05	IMR	CURE	74127	Gunnison sage grouse – habitat inventory of surrounding areas
Drees	BR-03-24	IMR	GLAC	85858	Manage invaders threatening Glacier's wilderness
Dratch	BR-03-19	IMR	GRCA	86497	Declining northern leopard frog population in the GRCA ecoregion: rims and river surveys
Dratch	BR-02-08	IMR	SAGU	70644	Status assessment and management of lowland leopard frogs
Eckert	BR-02-03	IMR	YELL	59873	Baseline inventory thermophile biodiversity
Mehrhoff	BR-03-08	MWR	BADL	83495	Document location and distribution of 9 rare plant species
Dratch	BR-03-03	MWR	BUFF	42018	Assess roost habitat conditions for 3 endangered bat species
Mehrhoff	BR-02-19	MWR	INDU	71487	Develop database for sensitive plants and orchid recovery plan
Cacek	BR-03-25	MWR	THRO	83602	Evaluate critical research threats using high resolution satellite imagery
DiSalvo	BR-02-10	NCR	GWMP	76008	Potential impacts of mosquito control activities
DiSalvo	BR-03-17	NCR	NCRO	89153	Compiling and analyzing historical insect data for Plummers Island, MD
Dratch	BR-03-21	NER	DEWA	89032	Assess long-term viability of newly discovered bog turtle population

Mehrhoff	BR-03-12	NER	NERI	1375	Determine status and trends of New River mussel community
Cacek	BR-03-13	NER	SHEN	81324	Gather essential operations for data for invasive vegetation control decision making
Dratch/Coffey	BR-03-20	PWR	CRMO	73887	Assessment of habitat for sagebrush steppe dependent birds
Mehrhoff	BR-03-14	PWR	GRBA	86791	Status and distribution of rare plants in subalpine and alpine habitat
Coffey	BR-03-01	PWR	HALE	87076	New Alaenui fence section
Coffey	BR-03-22	PWR	HAVO	85398	Investigate ecological impacts of the Kalij pheasants
Drees	BR-02-18	PWR	LAME	76792	Development of comprehensive invasive plant management plan
Coffey	BR-02-16	PWR	LAVO	76793	Taxonomic affinity, special ecology and resource utilization of red fox population
Coffey	BR-03-11	PWR	PINN	87331	Assessment of vascular plant communities before and after feral pig removal
Mehrhoff	BR-02-09	PWR	PORE	76945	Habitat assessment of the federally endangered Myrtle's silverspot butterfly
Eckert	BR-03-07	SER	MACA	81920	Recovery and reintroduction of American chestnut
Mehrhoff	BR-03-16	SER	VIIS	49192	Propagation and reintroduction of Solanum conocarpum, a critically rare shrub

33 of 40 projects administered by WASO project coordinators from BRMD

Table 2. Natural Resource Projects Managed Through the NRPP-NR Funding Source During FY 2003.

Coord	Project	Region	Park	PMIS	Title
Dratch	NR-02-19	AKR	DENA	24779	Determine baseline info along N. access corridor
Johnston	NR-02-10	AKR	GLBA	35569	Backcountry management data collection analysis
Coffey	NR-02-18	AKR	LACL	45148	Refine techniques to survey harvested brown bear populations
Mehrhoff	NR-02-03	AKR	WEAR	55754	Assessment of reindeer impacts to lichen ecosystem
Mehrhoff	NR-03-12	AKR	WEAR	55749	Inventory and status assessment of lichens in Noatak N.Preserve
Eckert	NR-03-20	AKR	WEAR	66111	Assess the potential for heavy metal bioaccumulation in terrestrial biota in Cape Krusenstren NM
Coffey	NR-02-26	IMR	BIBE	47430	Stop feral hog invasion
Mehrhoff	NR-02-36	IMR	CARE	59990	T&E plant pollinators
Dratch	NR-02-38	IMR	GLAC	73656	Wolverine population assessment
Dratch	NR-00-40	IMR	GRTE	55787	Monitoring of wolves
Wild	NR-03-09	IMR	GRTE	85177	Bison demographic monitoring, disease surveillance
Cacek	NR-02-12	IMR	IMRO	72973	Initiate IMR noxious weed inventory and mapping program
Coffey	NR-02-06	IMR	LAMR	72440	Protect native habitat by completing N boundary fence
Cacek	NR-03-07	IMR	LAMR	86108	Continue saltcedar control
Cacek	NR-02-33	IMR	PAIS	71547	Assess impacts on seagrass meadow
Cacek	NR-02-41	IMR	ROMO	67574	Implement invasive plant management plan
Wild	NR-03-01	IMR	ROMO	83009	Implement interim actions for CWD
Coffey	NR-03-22	IMR	ROMO	82761	Prepare a situation assessment for elk management EIS
Coffey	NR-03-10	IMR	YELL	71604	Multi-trophic level ecology of wolves, elk and vegetation
Eckert	NR-03-21	IMR	ZION	59782	restore highly impacted backcountry areas
Cacek	NR-03-23	MWR	CUVA	82354	Control invasive plant species and sensitive resource areas
Drees	NR-02-21	MWR	ISRO	72609	Implement wilderness management plan: carrying capacity and long-term monitoring
Eckert	NR-00-45	MWR	SLBE	63940	Restoration biodiversity
Coffey	NR-03-13	MWR	THRO	83208	Evaluate factors influencing the distribution and movement of elk
Wild	NR-03-02	MWR	WICA	1852	Monitor for CWD: deer movement, density, and potential transmission
Eckert	NR-03-08	NCR	GWMP	89278	Saving the Potomac George through partnerships

DiSalvo	NR-02-28	NCR	NCRO 76797	Dragonflies and damselflies: likely affected by WNV management
Dratch	NR-03-05	PWR	CHIS 86240	Reintroduce island fox on San Miguel and Santa Rosa Islands
Mehrhoff	NR-02-35	PWR	GOGA 76957	Ft. Baker blue butterfly habitat restoration
Drees	NR-03-04	PWR	HALE 86988	Prevent Miconia invasion from displacing Haleakala rainforest
Coffey	NR-02-16	PWR	KALA 76903	Exclude ungulates from upper Pu'u Ali'i Plateau
Johnston	NR-99-04	PWR	OLYM (179)	Evaluate goat management
Eckert	NR-02-10	PWR	OLYM 76880	Wilderness recovery at Boulder Hot Springs
Dratch	NR-02-08	PWR	PINN 76968	Reestablish California condors
Eckert	NR-02-17	PWR	PINN 76969	Climbing area restoration
Coffey	NR-03-15	PWR	PINN 87376	Eradicate feral pigs
Eckert	NR-01-05	PWR	PORE 60235	Coastal dune restoration
Cacek	NR-02-15	PWR	PORE 76886	Iceplant removal at lighthouse headlands
Cacek	NR-03-25	PWR	PORE 80291	Cape Ivy removal at GOGA and PORE
Cacek	NR-01-08	PWR	REDW 56602	Remove English ivy
Wild	NR-02-30	SER	BISO 70251	Reintroduce black bear
Coffey	NR-00-35	SER	COSW 50506	Develop feral hog reduction plan and initiate restoration
Coffey	NR-00-18	SER	CUIS 3964	Eradicate feral hogs
Drees	NR-02-04	SER	JELA 65820	Establish a bio-control program for Salvinia
Dratch	NR-02-02	SER	MACA 67942	Restore habitat for Indiana bat
Mehrhoff	NR-03-03	SER	MACA 81947	Propagation and restoration of endangered mussels in Green River

46 of 73 projects administered by WASO project coordinators from BRMD

Table 3. Endangered Species Projects Managed Through the NRPP-TE and Fee Demo-TE Funding Sources During FY 2003.

Project	Region	Park	PMIS	TITLE
TE-02-01	IMR	BITH	60181	Reintroduce Texas trailing phlox
TE-02-03	IMR	ROMO	70261	Reestablish, stabilize, and manage 19 populations of greenback cutthroat trout
TE-01-06	MWR	SACN	61184	Mussel communities in the St. Croix
TE-03-03	MWR	SLBE	1541	Wildlife management: piping plover preservation
TE-02-08	NCR	CHOH	75934	Restoration/ recovery of federally endangered Harperella
TE-03-05	PWR	HALE	85720	Critical assessment of habitat for releasing endangered Maui parrotbill
TE-03-01	PWR	HAVO	86345	Complete reintroduction of silversword
TE-02-04	PWR	LAME	76898	OHV damage control in desert tortoise critical habitat
TE-03-04	PWR	OLYM	88354	Effectiveness monitoring northern spotted owl demographic rates
TE-02-06	PWR	PINN	65245	Reestablish California red-legged frogs to Bear Gulch Reservoir
TE-02-05	PWR	SAMO	76865	Recovery of federally endangered Pentachaeta lyonii
TE-01-17	SER	CAHA	59382	Seabeach amaranth: habitat assessment/ restoration using remote sensing data
TE-03-02	SER	MACA	83759	Restoration of Echo River passage